

### **Abstract**

Polypeptides comprising amino acid sequences of particulate antigens isolated from various species of *Leishmania* protozoa, or immunogenic variants thereof, are disclosed for the treatment and clinical remission of psoriasis. Also disclosed are nucleic acid sequences encoding such polypeptides, vectors incorporating such nucleic acid sequences, methods for genetically engineering microbial host cells to produce such polypeptides, and such recombinant microbial host cells. In another embodiment, immunotherapeutic agents incorporating the polypeptides or the nucleic acid sequences are disclosed for the treatment and clinical remission of psoriasis. In another embodiment, methods for the production of the polypeptides using recombinant microbial host cells are disclosed. Finally, methods for the treatment and clinical remission of psoriasis comprising administration of a pharmaceutical composition comprising one or more of the polypeptides or one or more of the nucleic acid sequences are disclosed. The polypeptides induced a TH1 cellular immune response, a positive intradermic reaction, and a blastogenic response in peripheral blood lymphocytes after clinical remission of lesions. Populations of peripheral blood lymphocytes that are altered in psoriasis patients returned to normal values in patients who received the polypeptides and experienced clinical remission of lesions after treatment.